



# Virginia Healthcare Workforce Briefs

Indicators from the Bureau of Economic Analysis

Regional Economic Accounts

**Series 3: Income & Compensation**

Series 3, Issue 46

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## Highlights

### Inside this Brief:

HC&SA Earnings	2
HC&SA Earnings Growth	2
Growth Rate by Earnings Type	3
Annual Growth by Earnings Type	3
Compensation per Employee	4
Compensation Growth	4

- ◆ In addition to the new income and compensation estimates for Quarter 4 (Q4) 2022 from the Bureau of Economic Analysis (BEA), this report also includes revised estimates from Q1 2020 to Q3 2022.
- ◆ Virginia's Health Care & Social Assistance (HC&SA) sector increased total earnings by \$724 million to \$39.5 billion in Q4 2022, a gain that translates into a 7.7% annualized growth rate. In 2022, total HC&SA earnings in the state increased by \$3.7 billion.
- ◆ Total employee compensation in Virginia's HC&SA sector increased by \$691 million to \$36.8 billion in Q4 2022. This quarterly gain translates into a 7.9% annualized growth rate.
- ◆ Virginia's total HC&SA compensation per employee increased by \$425 in Q4 2022. With this increase, the HWDC estimates that employees in Virginia's HC&SA sector earn an average of \$78,487 per year.

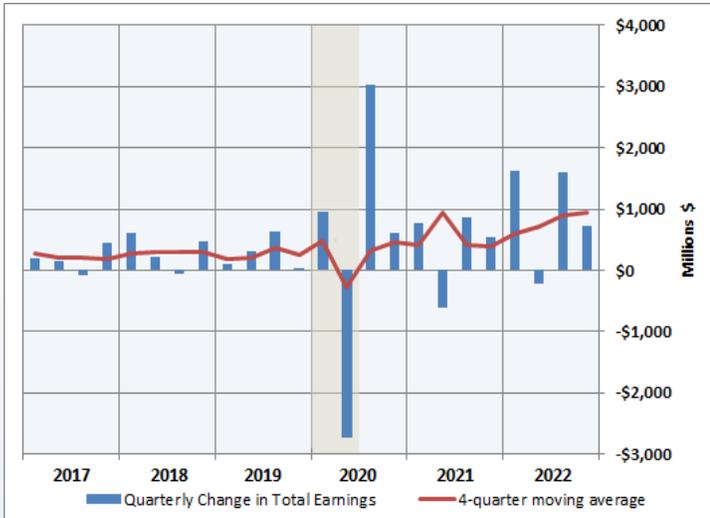
*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q4 2021	Q2 2022	Q3 2022	Q4 2022	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$395,161	\$403,871	\$418,625	\$424,968	7.5%	10.7%	6.2%
<b>National</b>	\$14,828,550	\$15,246,279	\$15,612,303	\$15,847,362	6.9%	8.0%	6.2%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$35,718	\$37,132	\$38,728	\$39,452	10.5%	12.9%	7.7%
<b>National</b>	\$1,631,629	\$1,676,320	\$1,721,197	\$1,755,714	7.6%	9.7%	8.3%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages &amp; benefits)</b>							
<b>Virginia</b>	\$32,963	\$34,542	\$36,088	\$36,779	11.6%	13.4%	7.9%
<b>National</b>	\$1,489,537	\$1,542,632	\$1,584,914	\$1,617,778	8.6%	10.0%	8.6%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$73,019	\$75,342	\$78,062	\$78,487	7.5%	8.5%	2.2%
<b>National</b>	\$80,656	\$82,112	\$83,384	\$83,744	3.8%	4.0%	1.7%

## Health Care & Social Assistance Earnings

**Figure 1: Quarterly Change in Total Earnings from Virginia's Health Care & Social Assistance Sector. Includes Proprietor's Income, Salaries and Wages, and Benefits.**

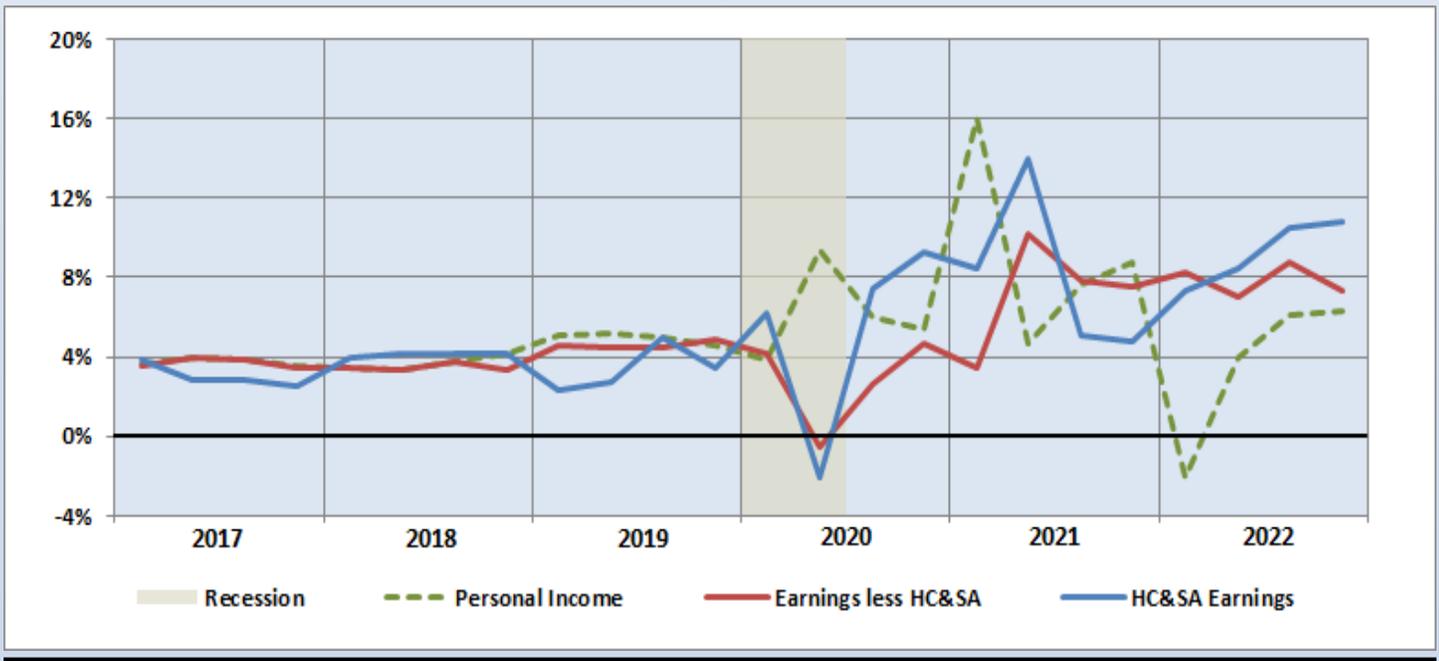


According to the preliminary data released on Friday, March 31, 2023, by the U.S. Bureau of Economic Analysis, total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector increased by \$724 million to \$39.5 billion in Q4 2022. This increase in Virginia's total HC&SA earnings represents a three-month annualized growth rate of 7.7%. Although this quarter's growth in total HC&SA earnings was slightly below the overall national average of 8.3%, long-term earnings growth in Virginia's HC&SA sector remains very strong. In 2022, total HC&SA earnings in the state increased by \$3.7 billion, a full-year gain that translates into a 10.5% growth rate. This full-year earnings growth rate is well above the comparable 7.6% growth rate for the national HC&SA sector as a whole. In fact, this year's increase in Virginia's total HC&SA earnings was greater than the gain from the two previous years combined.

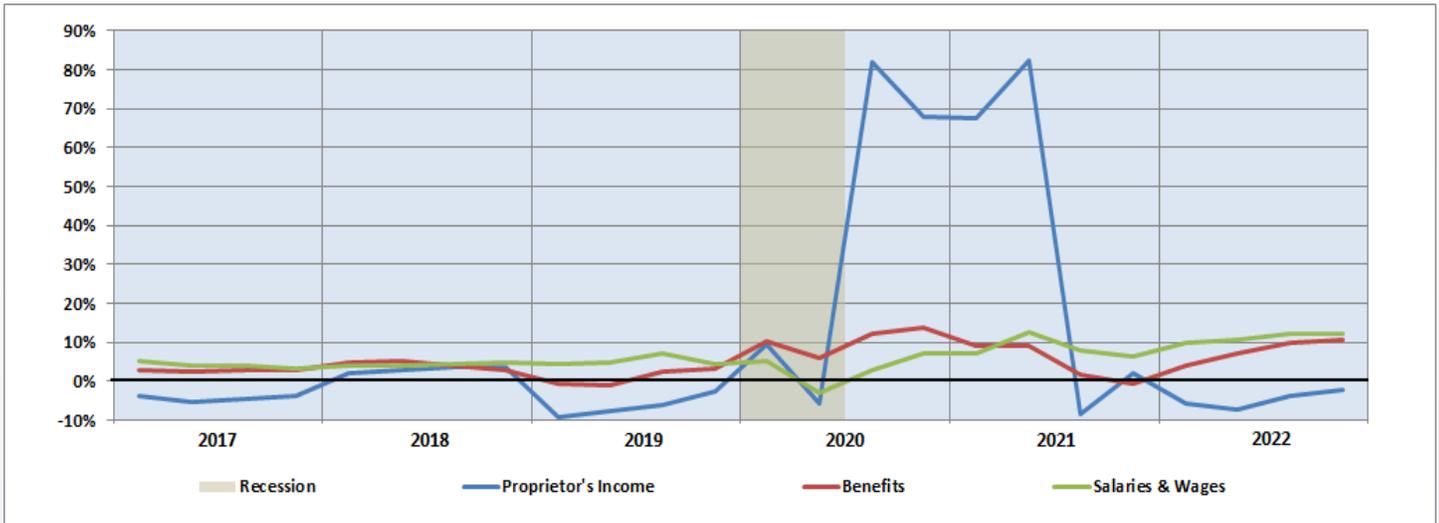
## Virginia HC&SA Earnings Growth Rate

In Q4 2022, the four-quarter growth rate moving average of Virginia's total HC&SA earnings increased from 10.47% to 10.82%. This quarter's increase continues the upward trend of this moving average, which has persisted throughout 2022. In fact, the four-quarter growth rate moving average of Virginia's total HC&SA earnings has more than doubled over the past year after having fallen to 4.80% in Q4 2021. With this quarter's increase, Virginia's four-quarter HC&SA earnings growth rate moving average has reached its highest value since Q2 2021. On the other hand, the four-quarter growth rate moving average of Virginia's non-HC&SA earnings fell from 8.74% to 7.35% in Q4 2022. As for Virginia's personal income, its four-quarter growth rate moving average drifted upward slightly from 6.15% to 6.27%. This quarter's gain, despite being relatively modest, still increased this moving average to its highest value in 2022.

**Figure 2: Earnings Growth Rate, 4-Quarter Moving Average (Annualized)**



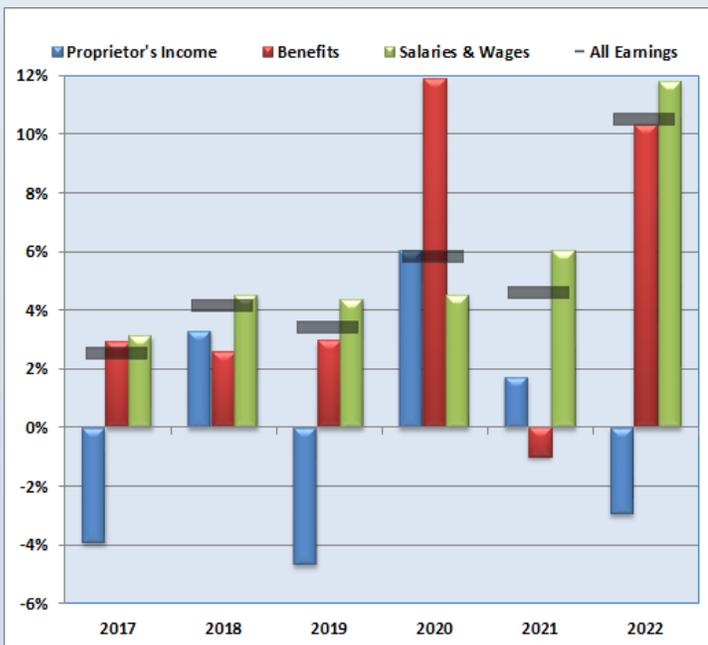
### Virginia HC&SA Earnings Growth Rate by Earnings Type



**Figure 3: Earnings Growth Rate by Type of Earnings, 4-Quarter Moving Average (Annualized)**

Virginia’s HC&SA employee salaries & wages experienced a slight increase to their four-quarter growth rate moving average from 12.20% to 12.29% in Q4 2022. With this increase, Virginia’s HC&SA employee salaries & wages continue to maintain a higher four-quarter growth rate moving average than either HC&SA employee benefits or HC&SA proprietor’s income. However, Virginia’s HC&SA employee benefits reduced this gap in Q4 2022 as its four-quarter growth rate moving average increased from 9.73% to 10.74%, thereby reaching its highest value in two years. Both forms of HC&SA employee compensation continue to grow at much faster rates than HC&SA proprietor’s income. In fact, HC&SA proprietor’s income still has a negative four-quarter growth rate moving average, although it did increase from -3.70% to -2.35% in Q4 2022.

### Annual Growth by Earnings Type



**Figure 4: Virginia HC&SA Earnings Growth Rate by Type of Earnings (Annualized)**

Virginia’s HC&SA sector has enjoyed exceptional earnings growth over the past year. In fact, the 10.5% growth in the state’s total HC&SA earnings in 2022 was more than double its 4.6% growth rate in 2021. Indeed, this result represents the highest annual growth rate in Virginia’s total HC&SA earnings over the past two decades. HC&SA employee salaries & wages, which also grew at their highest annual rate over the past two decades in 2022, were the main driver of this year’s HC&SA earnings growth. In 2022, HC&SA employee salaries & wages increased by 11.8%. HC&SA employee benefits also enjoyed impressive earnings growth over the past year. After falling by 1.0% in 2021, HC&SA employee benefits rebounded strongly with a 10.3% growth rate in 2022. On the other hand, HC&SA proprietor’s income fell by 3.0% in 2022. This represents the second time in the past four years in which HC&SA proprietor’s income in the state has fallen.

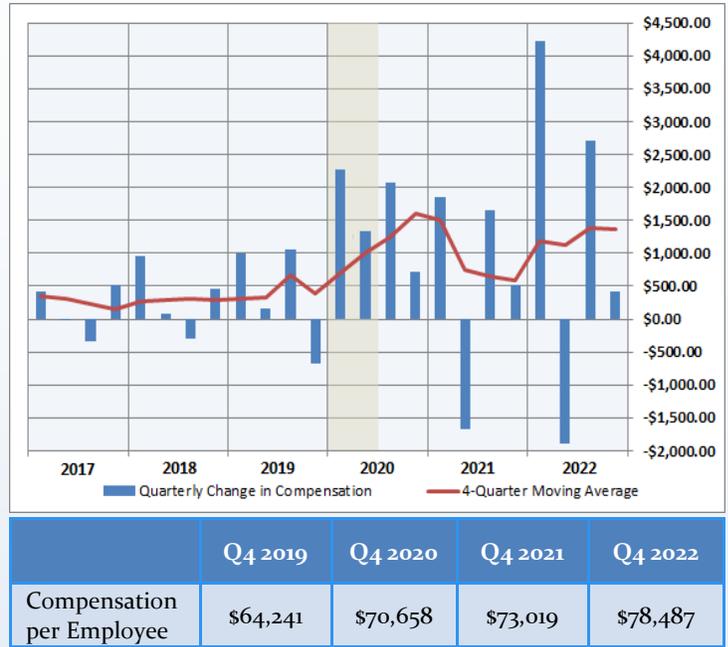
Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,673	6.8%
Benefits	\$6,034	15.3%
Salaries & Wages	\$30,745	77.9%
<b>Total</b>	<b>\$39,452</b>	<b>100%</b>

### HC&SA Compensation per Employee

According to the Healthcare Workforce Data Center’s estimates (see methodology, next page), employees in Virginia’s HC&SA sector earned an average of \$78,487 (annualized) in Q4 2022. Note that this figure includes salaries & wages plus the cost of benefits for employed persons, only. Practitioners in private practice, which includes a large number of the sector’s highly paid professionals, are not included in this figure.

In Q4 2022, total compensation per employee in Virginia’s HC&SA sector increased by \$425, a gain that represents a three-month annualized growth rate of 2.2%. This growth rate exceeds the overall nationwide average as total compensation per employee in the national HC&SA sector increased by \$360, which translates into a 1.7% annualized growth rate. Total HC&SA compensation per employee in the state increased by \$5,468 in 2022. This full-year gain translates into a 7.5% growth rate, or nearly double the comparable 3.8% growth rate of the national HC&SA sector.

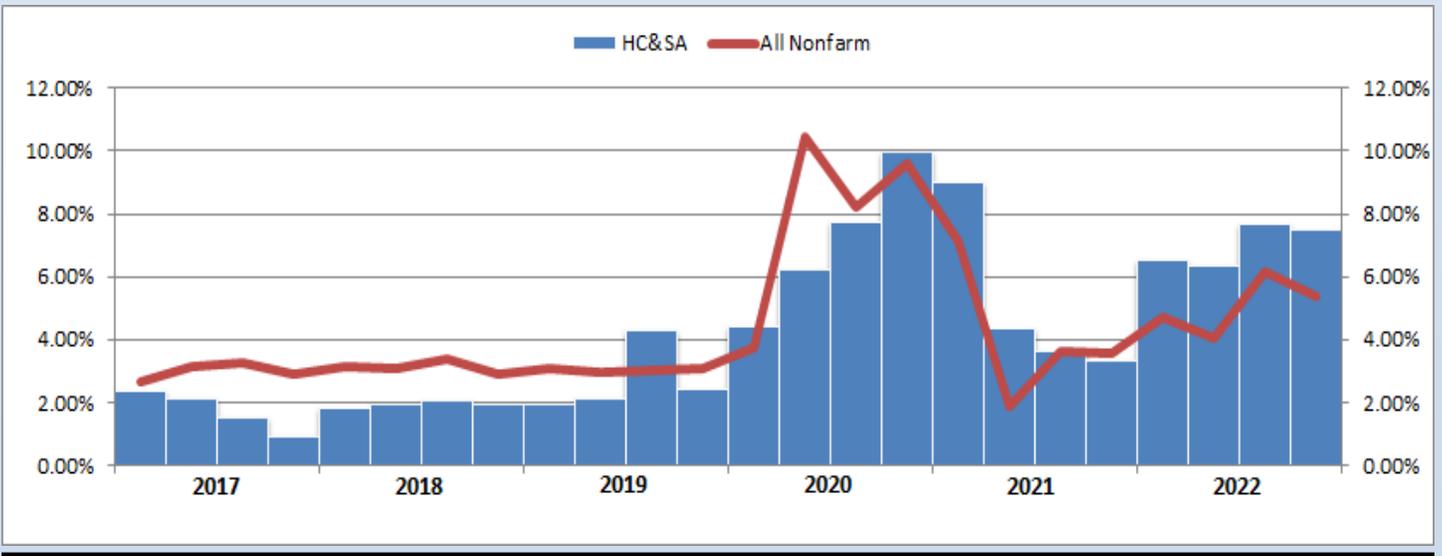
**Figure 5: Quarterly Change in Employee Compensation from Virginia’s Health Care & Social Assistance Sector.**



### Compensation per Employee Growth Rate

In Q4 2022, the year-over-year growth rate of total compensation per employee in Virginia’s HC&SA sector experienced a slight decline from 7.68% to 7.49%. Despite this decline, Virginia’s HC&SA sector still enjoys strong year-over-year growth in its total compensation per employee. In fact, this growth rate has more than doubled when compared to the year-ago quarter. Total compensation per employee in Virginia’s HC&SA sector continues to grow at a rate that exceeds the overall average for the statewide economy. Specifically, the year-over-year growth rate of Virginia’s total nonfarm payroll compensation per employee fell from 6.14% to 5.38% in Q4 2022. Regardless, this growth rate is still 50% higher than it was in the same quarter one year ago.

**Figure 6: Year-Over-Year Change in Compensation Per Employee.**



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## Definitions

Economic data in this briefing is from the U.S. Bureau of Economic Analysis' Regional Economic Accounts. In particular, we use the Quarterly State Personal Income Accounts. The definitions provided here are written for a lay audience. More technical definitions and in-depth information on the Regional Economic Accounts are available on the BEA's website:

<http://www.bea.gov/regional/about.cfm>.

**Personal Income:** Income received from all sources, including salaries & wages, benefits, business profits, rents, government payments or retirement and investment funds. Personal income is based on where recipients live.

**Earnings:** Earned income includes salaries & wages, benefits (aka supplements to wages and salaries) and proprietor's income. Earnings and its components are based on where recipients work.

**Proprietor's Income:** Income from small businesses (sole proprietorships & partnerships), corporate director's fees and tax-exempt cooperatives. It does NOT include dividends or interest received by non-financial businesses or rental income received by non-real estate businesses.

**Compensation:** Salaries & wages and benefits.

**Benefits:** Referred to as "supplements to wages and salaries by the BEA, benefits includes employer contributions to retirement funds, insurance (including health and life) and to government social insurance programs (e.g., unemployment insurance, Social Security, worker's compensation insurance, etc.).

**Salaries & Wages:** Salaries, wages, commissions, bonuses and tips, before deductions, based on when payments are disbursed. The value of stock options are also included at the time the options are exercised.

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## Method of Estimating Compensation per Employee

The HWDC derives estimates of compensation per employee from two sources: 1) U.S. Bureau of Economic Analysis' Regional Economic Accounts (REA), and, 2) the Current Establishment Survey (CES) administered jointly by the U.S. Bureau of Labor Statistics and the U.S. Census Bureau. These sources use different methodologies and different definitions. Although more vigorous estimates of employment are available, the HWDC uses these sources to provide the most timely indication of current trends possible at the state-industry level. The HWDC estimates are early indicators only.

To make the two data sources more comparable, the HWDC makes the following transformations:

**CES:** To obtain quarterly estimates of employment, monthly figures are averaged for the quarter. For nonfarm employment, we remove the latest available estimate of logging employment from the Quarterly Census of Employment and Wages, rounded to the nearest hundred, from nonfarm totals in the CES prior to averaging.

**REA:** From nonfarm compensation (or its components), we remove military earnings, agriculture, fishing and forestry earnings and an estimate of earnings from households. For household earnings estimates, we use the REA's Annual State Personal Income and Employment tables to develop current estimates of the proportion of "Other services, except public administration" compensation from employment in private households. We use the most recent data available for the current quarter. We apply this proportion to the current quarterly estimate of "Other services, except public administration".

Despite these transformations, the figures are not wholly comparable. The BEA makes additional adjustments to BLS data when creating its own, annual estimates of employment. Historical indicators are not adjusted by the HWDC, however adjustments made to REA or CES series are incorporated into historical data. For more information on employment data and the REA, see the BEA's *State Personal Income and Employment Methodology*, pages XI-1 to XI-11 & Table K.

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The Department of Health Professions' Healthcare Workforce Data Center works to improve the data collection and measurement of Virginia's healthcare workforce through regular assessment of workforce supply and demand issues among the 80 professions and 350,000 practitioners licensed in Virginia by the DHP.

The HWDC collects data on Virginia's licensed health professionals through surveys completed during the online license renewal and application process. Survey results and data may be accessed on our website: [www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/](http://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/).

The HWDC also provides a series of Virginia Healthcare Workforce Briefs based on data collected by the U.S. Department of Labor's Bureau of Labor Statistics and the U.S. Department of Commerce's Bureau of Economic Analysis.

Virginia Healthcare Workforce Briefs:

Series 1: State & National Employment (Monthly)

Series 2: Virginia Regional & Sectoral Employment (Monthly)

Series 3: Income & Compensation (Quarterly)

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## About the Data

Data used in creating this report is from the U.S. Department of Commerce, Bureau of Economic Analysis' Regional Economic Accounts. Unless otherwise noted, data is seasonally adjusted and annualized, and quarterly presentations are based on the calendar year. Data from recent quarters is preliminary and subject to revision in future releases from the BEA. Revisions will be reported in future editions of this series.

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